

AMENDMENTS TO THE DRAWINGS:

Figure 1 has been amended to include the reference numeral 10.

REMARKS

By this amendment, Applicant has amended the claims to more clearly define his invention. In particular, claim 1 has been amended to recite that the collecting tubes have another end operably connected to an inner space of the base tube so that the pressure drop is a function of a dimension and number of the collecting tubes.

Claims 1 to 6 have been amended to delete the reference numerals therefrom and claims 7 and 8 amended to be proper method/process claims. Applicant has also added claim 9 to further define the operable connection between the another end of the collecting tubes and the inner space of the base tube, i.e. that the another end of the collecting tubes opens to a chamber surrounding the base tube, the chamber being in communication with the openings in the base tube. See, e.g., Figure 1. Claims 10 and 11 have been added directed to a filter pipe for collection of effluent and a filter pipe for injection of a fluid, respectively.

Applicant has amended the drawing to add reference numeral 10 as required by the Examiner in numbered section 1 of the Office Action.

In view of the amendment to Figure 1 adding reference numeral 10, reconsideration and withdrawal of the objection to the drawings in numbered section 1 of the Office Action are requested.

In view of the foregoing amendments to claims 7 and 8, it is submitted that these claims requirements of 35 U.S.C. 101 and 35 U.S.C. 112, second paragraph. Accordingly, reconsideration and withdrawal of the rejection of these claims under 35 U.S.C. 101 and 35 U.S.C. 112, second paragraph, in numbered sections 2-5 of the Office Action are requested.

In view of the deletion of the reference numerals from the claims, reconsideration and withdrawal of the objection to claim 3 in numbered section 6 of the Office Action are requested.

Claims 1-3, 5, 7 and 8 stand rejected under 35 U.S.C. 102(a) as allegedly being anticipated by International Publication No. WO 02/31314 (WIPO '314). Applicant traverses this rejection and request reconsideration thereof.

The present invention relates to a controlled-pressure drop liner device. As shown, by way of example only in Figure 1, the device includes a circumscribed filter element 9 centered on a base tube 1 by longitudinal braces 14 in relation to the axis of the tube (see Figures 3 and 4) and arranged according to the diameter of the tube so as to divide the annular space defined by the filter element and the tube into sectors delimiting by the braces 14. Collecting tubes 5 are arranged and open into the sectors by one end. The collecting tubes 5 have another end operably connected to an inner space of the base tube 1 so that the pressure drop is a function of the dimension and a number of the collecting tubes. See, e.g., page 5, lines 9-13 of Applicant's specification.

WIPO '314 discloses a drain element for collecting hydrocarbons including a screen TM enclosing a suction cylinder CA. The screen is formed with rods TT, TC extending along the longitudinal direction AL and uniformly distributed around the section cylinder. At least one of the rods is hollow to form a collecting rod TC, the collecting rod TC having a lateral orifice and communicating with the inside of the suction cylinder through one of its ends. Thus, while the collecting tubes of the present invention open into the sectors between the longitudinal braces by one end, the collecting rods TC of WIPO '314 have lateral orifices OC. By having the collecting tubes open into the sectors by one end, according to the present invention,

the pressure drop is a function of the dimension and number of collecting tubes. Having the collecting tubes open into the sectors by one end so that the pressure drop is a function of a dimension and number of the collecting tubes is not disclosed in WIPO '314. Accordingly, the presently claimed invention is patentable over WIPO '314.

Claims 1, 7 and 8 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 2,179,020 to Ranney. Applicant traverses this rejection and request reconsideration thereof.

The Ranney patent discloses a continuous double-walled segmental shaft for recovery fluids from or supplying fluids to subterranean formations. The Examiner alleges pipes 48 of Ranney to be collecting tubes. However, as described at page 2, left column, line 19 et seq. of Ranney, pipes 48 are used if the water-bearing material opposite the shaft is extremely fine (running sand for example). In that case, each cell may be fitted with a perforated pipe 48 which may serve as a backwash water pipe. The pipe prevents the gravel filler in the cell from passing into the shaft. Therefore, clearly the pipes 48 of Ranney are not collecting tubes. Moreover, since the pipes 48 of Ranney are perforated, they do not open into the sectors by one end, as presently claimed. Moreover, the pipes 48 of Ranney cannot serve as collecting tubes so that the pressure drop is a function of a dimension and number of collection tubes, as presently claimed. Accordingly, the presently claimed invention is patentable over Ranney.

Claim 4 stands rejected under 35 U.S.C. 103(a) as being unpatentable over WIPO '314 in view of Ranney. Applicant traverses this rejection and request reconsideration thereof.

The deficiencies of each of WIPO '314 and Ranney are noted above. It is submitted the combination of WIPO '314 and Ranney does not disclose and would not suggested the presently claimed invention. In particular, the combination would not have suggested at least the collecting tubes presently claimed. Accordingly, claim 4 is patentable at least for this reason.

Applicant notes the indication of allowable subject matter in claim 6. However in view of the foregoing amendments and remarks, it is submitted that all of the claims now in the application are in condition for allowance.


Applicant notes the Examiner has cited a number of documents as being pertinent to Applicant's disclosure. However, since these documents were not applied and rejecting claims formerly in the application, further discussion of these documents is deemed unnecessary.

In view of the foregoing amendments and remarks, favorable reconsideration and allowance of all of the claims now in the application are requested.

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Respectfully submitted,

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